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| 10/585,764  | 07/02/2008  | Klaus Voigt          | 016906-0525         | 7890             |
| 23428 7590 03/29/2011<br>FOLEY AND LARDNER LLP<br>SUITE 500<br>3000 K STREET NW<br>WASHINGTON, DC 20007 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| MILLER, SAMANTHA A  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/585,764

**Applicant(s)**

VOIGT ET AL.

**Examiner**

SAMANTHA A. MILLER

**Art Unit**

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 8/25/2010/7/12/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on 8/25/2010 and 7/12/2006; have been considered by the examiner.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "air flow control element" "housing" "motor vehicle" "at least two setting ranges" "a first setting range" "a second setting range" "a vehicle interior" "a first end position", "intermediate positions" "a second end position" slide switch" "at least one actuating element of at least one air vent and/or at least one actuating element of at least one air flow control element has at least one electric motor as actuator" "the adjustment or setting of the at least one operating element of the operating unit is detected via an electronic position sensor" "a swirl nozzle" "a heating or air conditioning unit, in particular for a motor vehicle wherein the heating or air conditioning unit contains at least one actuating device" "heat exchanger" "heating element" "evaporator" "filter" "temperature" "mixing flap" "mixing chamber" "control flaps" "outlet ducts" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

The term "at least one actuating element" in claims 1, 3- 5, 7-11, and 13 is a relative term which renders the claim indefinite. The term "actuating" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Specification and Drawings don't describe or show if the actuating element is moving or moving another element not show making the term indefinite.

The terms "at least two setting ranges, a first setting range, a second setting range" in claims 2 and 3 are a relative term which renders the claim indefinite. The term "ranges" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Specification and Drawings don't describe or show what is defined as a setting range.

The term "a spot flow" in claim 4 is a relative term which renders the claim indefinite. The term "spot" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Specification and Drawings only implies that there is a spot position when air is only being directed to the

face however this is not the known meaning of the term "spot flow" and would have to be more definitively described.

The term "at least one actuating element" in claim 4 is a relative term which renders the claim indefinite. The term "actuating" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Specification and Drawings don't describe or show if the actuating element is moving or moving another element not show making the term indefinite.

The terms "a first end position and second end position" in claim 5 is a relative term which renders the claim indefinite. The term "end position" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The first end position and second end position are on a circle that does not have ends.

The terms "at least one cam disk and at least one radial cam and a cam disk" in claim 8 are relative terms which renders the claim indefinite. The term "cam" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Specification and Drawings don't describe or show a cam which is a gear without teeth, the cams claimed seem to be merely disks.

The limitation "at least one actuating element of at least one air vent of at least one air flow control element has at least one electric motor as actuator" in claim 9 is a

relative term which renders the claim indefinite. The limitation is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The Specification and Drawings don't describe or define how the at least one actuating element of at least one air vent of at least one air flow control element has at least one electric motor as actuator since the at least one actuating element of at least one air vent is actuated by the Bowden cable or flexible shaft.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by NIELING (5,700,191).

NIELING teaches:

1. An actuating device (made of 55, 56, and 57), in particular for setting at least one actuating element (55', 56', 57') of at least one air vent (50 at 55, 56, 57), and at least one actuating element (35) of at least one air flow control element in at least one air-guiding duct (50 at 51 and 52) in a housing of a heating or air conditioning unit (at 37', 37) in a motor vehicle, with an operating unit (5) having at least one operating element (9), and at least two elements (71, 61) for transmitting movements of the operating element to the actuating elements, characterized in that wherein at least one

actuating element of an air vent and at least one actuating element of an air flow control element can be adjusted with the at least one operating element (Fig.2) of the operating unit (Fig.4c).

2. The at least one operating element (9) of the operating unit (5) has at least two setting ranges (26, 27, and 28; 25, 29, 28) which are independent of each other.

3. By changing the position of the at least one operating element (9), at least one adjusting element (55', 56', and 57') of at least one air vent (55, 56, 57) can be actuated in a first setting range (Fig.2) and at least one adjusting element (35) of at least one air flow control element can be actuated in a second setting range (Fig.2).

4. The setting of at least one actuating element of at least one air vent in the first setting range of the at least one operating element can be changed in such a manner that, in a first end position (28), diffuse air can be introduced into a vehicle interior, in intermediate positions (27) a mixture of diffuse and directed air can be introduced and, in a second end position (26), directed air or a spot flow can be introduced therein.

5. The setting of the actuating element of the air flow control element in the second setting range of the at least one operating element can be changed in such a manner that, in a first end position (25), preferably the windshield of a vehicle can be ventilated, in intermediate positions (29) the windshield and the foot well of a vehicle can be ventilated and, in a second end position (28), preferably the foot well of a vehicle can be ventilated (Fig.2).

6. The at least one operating element of the operating unit is a rotary switch or slide switch (rotary switch, shown in Fig.2).

7. The element for transmitting movements of the at least one operating element of the operating unit to at least one actuating element of at least one air vent and to at least one actuating element (35) of at least one air flow control element is a Bowden cable (45) or a flexible shaft (Fig.4b).

8. The activation for transmitting movements of the at least one operating element (7, 8, 9) of the operating unit to at least one actuating element of at least one air vent (55', 56', 57') and to at least one actuating element of at least one air flow control element (34) takes place via at least one cam disk (disk of 9, disk of 7) with at least one radial cam (the round surface of disk 9 or the round surface of 7, equivalent to applicants radial disk), preferably by means of a cam disk (7, 9) with at least two radial cams (disks of 7 and 9) or by means of two cam disks (disks of 7 and 9) each having at least one radial cam (surface of 7 and 9).

9. The at least one actuating element (35) of at least one air vent (51) and/or at least one actuating element of at least one air flow control element has at least one electric motor (44') as actuator (Fig.4a).

10. The adjustment or setting of the at least one operating element (7 or 9) of the operating unit is detected via an electronic position sensor (such as 41) and can be transmitted by means of transmission elements in the form of electric lines (42) to at least one actuator (44') of at least one actuating element of at least one air vent (51) and/or of at least one actuating element of at least one air flow control element (53) (Fig.4a).

11. The at least two actuators (44, 44') of the actuating elements are combined in a central unit (Fig.4a) and the actuating elements (35 and 55', 56', 57) can be adjusted via Bowden cables (45) or flexible shafts (9', 71, 61, 35') (Fig.4b-c).

13. The heating or air conditioning unit (Fig.4c) contains at least one actuating device according to one of claim 1.

14. The heating or air conditioning unit comprises at least one of the following components: heat exchanger (37), heating element (38), evaporator (37'), filter, temperature mixing flap, mixing chamber, one or more flow ducts and one or more control flaps for distributing the air to the outlet ducts.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over NIELING (5,700,191) in view of GREINER (5,890,958).

NIELING teaches the invention above, however NIELING does not teach a swirl nozzle.

12. The at least one air vent (18) is designed as a swirl nozzle (nozzle shown in Fig.7) (col.6 ll.34-44).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the outlet taught in NIELING in view of the

swirl nozzle taught in GREINER so when flowing towards the vehicle occupants, in contrast, a diffused distribution of air is preferred for reasons of air-conditioning comfort (GREINER, col.1 ll.32-34).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMANTHA A. MILLER whose telephone number is (571)272-9967. The examiner can normally be reached on Monday - Thursday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samantha A Miller/  
Examiner, Art Unit 3749  
3/7/2011

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/Steven B. McAllister/

Supervisory Patent Examiner, Art Unit 3749